

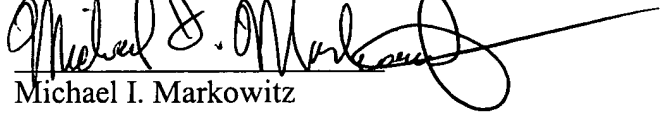
Applicant respectfully disagrees with Examiner's conclusion that Novotny, et al. anticipates Claims 1 and 5. Specifically Novotny, et al. nowhere discloses, teaches or suggests the specific configuration of a plurality of film electrodes on the rear surface of a semiconductor chip, a plurality of protruding electrodes on the front surface of the semi-conductor chip, and insulator resin film covering the semiconductor chip, while exposing the film electrodes and the top portion of each of the protruding electrodes, and a conductive film formed on the top of the protruding electrodes. Although an upper electrode and a lower electrode are shown and an insulating layer is shown in Figure 4 of Novotny et al., there is no depiction of where the semiconductor chip is with relationship to those elements and there is no conductive film shown, only a protective film.

In addition, Claim 5 of the present invention defines that a portion of a side surface of the semiconductor chip is exposed from the insulator resin film. In the structure shown in Fig. 9, a side surface of the semiconductor chip 15 is exposed from the insulator resin film 16. This structure is suited for electrical connection of the electrodes 15a and 15b on the chip to the terminals on the printed circuit board, if the semiconductor chip is desired to be laid on its side, (page 12, line 22 – page 13, line 2, of the specification.)

None of the cited references teach or suggest the above feature of the present invention.

A fee due with this paper, not fully covered by an enclosed check, may be charged on Deposit account 50-1290.

Respectfully submitted,



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Enclosures: Version with Markings to Show Changes Made
Copy of original drawing sheet containing original
Fig. 2 with proposed amendments in red
New Fig. 2B

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

The paragraph beginning on page 8, line 20, and ending on page 9, line 2, has been rewritten as follows:

The resultant array of chips on the adhesive sheet 18 is then taken out from the work table 20, and the adhesive sheet 18 is subjected to extension in the diagonal directions of the arrangement of the semiconductor chips. This allows the gap between each two of the semiconductor chips to increase, as shown in Fig. 5. In Fig. 5, the bump electrodes 19b and the film electrodes [19b] 19a shown in Fig. 4 are denoted by symbols 15b and 15a, respectively.

The paragraph on page 6, lines 3-4, has been rewritten as follows:

[Fig. 2] Figs. 2A and 2B are sectional [view] views of a chip-type semiconductor device according to an embodiment of the present invention.

The paragraphs beginning on page 6, line 18, and ending on page 7, line 20, have been rewritten as follows:

Referring to [Fig. 2,] Figs. 2A and 2B, a chip-type semiconductor device according to an embodiment of the present invention includes: a semiconductor chip 15 having a plurality of film electrodes 15a on the rear surface of the semiconductor chip 15 and a plurality of bump front electrodes 15b protruding from the front surface of the semiconductor chip 15; an insulator resin film 16 formed on entire surfaces of the

semiconductor chip 15 while exposing the film electrodes 15a and the top surfaces of the bump front electrodes 15b; and a conductive resin film 17 formed on the front side of the semiconductor chip 15, or on the top surfaces of the bump front electrodes 15b. The conductive resin film 17 is configured as a plurality of interconnect lines connected to the bump front electrodes 15b.

The semiconductor device shown in Fig. [2] 2A is mounted on a printed circuit [board,] board 23a, with the rear electrodes 15a being mounted on respective terminals of the printed circuit board for electrical connection. The conductive film 17 constituting interconnect lines is also connected to the terminals of the printed circuit board 23a by bonding [wires.] wires 24. In an alternative, the semiconductor device can be sandwiched between a pair of printed circuit [boards,] boards 23a, 23b, with the rear electrodes 15a being mounted on terminals of one of the printed circuit boards and the conductive film 17 being connected to terminals of the other of the printed circuit [boards.] boards, (see Fig. 2B).

The semiconductor device of [Fig. 2] Figs. 2A and 2B is fabricated by the process as detailed below with reference to [Figs] Figs. 3 to 7.